

Municipal Separate Storm Sewer System (MS4) Program Plan 2013 – 2018

Stafford County, Virginia



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MS4 Program Plan (2013-2018)

Stafford County, Virginia

Background

This document represents Stafford County's Municipal Separate Storm Sewer System (MS4) Stormwater Management Program Plan (MS4 Program Plan) to comply with the requirements of the Virginia Stormwater Management Program (VSMP) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4 General Permit). This MS4 Program Plan is submitted in satisfaction of the MS4 Program Plan development and update requirements contained in Section II.A and Table 1 of the current permit, which became effective on July 1, 2013 and will expire on June 30, 2018.

Stafford County is located in Northern Virginia, between Washington, D.C and Richmond, VA, and within the Interstate-95 corridor. The County encompasses approximately 277 square miles, with a significant portion of that land being owned by the Federal Government as part of the Quantico Marine Corps Base. Portions of the County are located within two of Virginia's major watersheds, the Potomac and Rappahannock Rivers.

In the northern portions of the County, four major tributaries (Aquia Creek, Accokeek Creek, Chopawamsic Creek and Potomac Creek) drain to the Potomac River, generally from west to east across the County. In the southern portions of the County ten major tributaries (Deep Run, Richland Run, Horsepen Run, Rocky Pen Run, England Run, Falls Run, Claiborne Run, Little Falls Run, White Oak Run, and Muddy Creek) drain to the Rappahannock, generally in a north to south direction.

Portions of the County were identified as urbanized areas in the 2000 Decennial Census by the Bureau of Census, therefore the County is regulated under the Virginia Stormwater Management Program (VSMP) for discharges of stormwater from a Municipal Separate Storm Sewer System (MS4). Under this program, Stafford County is authorized to discharge into surface waters within the boundaries of the Commonwealth of Virginia in accordance with the MS4 General Permit (9VAC25-890-40).

The County has been operating under the terms of previous and/or the current MS4 General Permit since August, 2003. Over the past ten Permit years, the County has successfully implemented numerous BMPs as part of its ongoing Stormwater Management Program, as documented in the Annual Reports submitted to the permitting authority.

This MS4 Program Plan is a continuation of the County's current Program (details of previously implemented BMPs can be found in the Annual Reports) and addresses the six minimum control measures outlined in the current MS4 General Permit. Stafford County has also incorporated a Program Administration section into the MS4 Program Plan to facilitate program assessments, updates, and compliance with special conditions as required by the General Permit. This MS4 Program Plan updates and supersedes the plan submitted with the Registration Statement dated January 9, 2009.

For each of the BMPs selected to meet compliance requirements, the County has identified *BMP / Program elements, objectives, measurable goals, necessary documents, responsible party(ies), implementation schedules, and items to report*. The MS4 Program Plan is organized into seven sections corresponding to the requirements of the MS4 General Permit. The first section provides details on Program Administration, while the next six sections match the six minimum control measures, noting the requirements from the MS4 General Permit text.

Also, and in accordance with the special conditions contained in Section I.B. of the MS4 General Permit, and during the preparation of this MS4 Program Plan, Stafford County researched the Virginia Department of Environmental Quality's (DEQ) website (<http://deq.state.va.us>) to identify any Total Maximum Daily Loads (TMDLs) approved by the State Water Control Board which include a wasteload allocation (WLA) to the County's regulated small MS4. Based on this research, there is one approved TMDL (Bacteria TMDL for the Tidal Freshwater Rappahannock River Watershed) for which a WLA has been assigned to Stafford County's regulated small MS4. Accordingly, Stafford County has added BMP/Program Element B under the Program Administration section of this plan to address these special condition requirements in the MS4 General Permit.

Per the special conditions contained in Section I.C. of the MS4 General Permit, Stafford County is required to address the nitrogen, phosphorus, and total suspended solids load reduction requirements based on the Commonwealth of Virginia's Chesapeake Bay TMDL Watershed Implementation Plans (WIP). To fulfill these requirements, Stafford County has added BMP/Program Element C under the Program Administration section of this plan.

As necessary during the County's term of coverage under the MS4 General Permit, and in accordance with Table 1 in the Permit, Stafford County will update its MS4 Program Plan to incorporate TMDL Action Plans that identify the best management practices and other interim milestone activities that will be implemented during the remaining term of this Permit for pollutants identified in TMDL wasteload allocations (that include wasteloads allocated to the County's regulated small MS4) approved either on or after July 9, 2008. Stafford County plans to participate as a stakeholder in the development of implementation plans for addressing TMDLs for which a WLA has been established for the County's MS4.

Program Administration

Permit requirement:

As operator of a regulated small MS4, Stafford County must annually evaluate:

- *Program compliance;*
- *The appropriateness of the identified BMPs; and*
- *Progress towards achieving the identified measurable goals.*

Stafford County must also address the special conditions for approved TMDLs other than the Chesapeake Bay contained in Section I.B of the General Permit as well as the special conditions for the Chesapeake Bay TMDL contained in Section I.C of the General Permit.

- A. BMP/Program Element:** Evaluate program compliance, the appropriateness of the program BMPs, and progress towards achieving identified measurable goals.

Objective: To evaluate program compliance and whether BMPs are achieving the objectives intended and to provide a framework for enhancing the program as appropriate.

Measurable Goal: Stafford County will evaluate identified BMPs annually to determine appropriateness and provide recommendations for continuance or revision. As part of this effort, the County will keep records required by the permit for three years and will submit Annual Reports to DEQ.

Necessary Documents: Stafford County MS4 Program Plan

Responsible Party: Stafford County Department of Public Works.

Implementation Schedule: The first evaluation will be conducted and reported on in permit year one and annually thereafter.

Items to Report: Documentation of the evaluations in the annual reports.

- B. BMP/Program Element:** Develop & implement a TMDL Action Plan for the Bacteria TMDL for the Tidal Freshwater Rappahannock River Watershed.

Objective: To address the *E. coli* wasteload reduction requirement allocated to the Stafford County MS4 in this TMDL that was approved by the State Water Control Board on 4/28/2009.

Measurable Goal: Stafford County will develop a TMDL Action Plan to address the *E. coli* wasteload reduction requirement allocated to the County's MS4 in this TMDL using available guidance documents.

Necessary Documents: Available TMDL action plan guidance documents.

Responsible Party: Stafford County Department of Public Works.

Implementation Schedule: Development of the Action Plan will be completed during permit year three with implementation of the plan in accordance with the schedule contained therein.

Items to Report: Submission of the Action Plan with the Permit Year three annual report. Report on the progress of implementation and effectiveness of the TMDL Action Plan annually.

- C. BMP/Program Element:** Develop and implement a Chesapeake Bay TMDL Action Plan.

Objective: To address the nitrogen, phosphorus, and total suspended solids load reduction requirements based on the Commonwealth of Virginia's Chesapeake Bay TMDL Watershed Implementation Plans (WIP).

Measurable Goal: Stafford County will develop a Chesapeake Bay TMDL Action Plan using DEQ's Guidance Memo No. 14-2012 entitled *Guidance for Meeting the Special Condition for the Chesapeake Bay TMDL Requirements*.

Necessary Documents: DEQ's Guidance Memo No. 14-2012 - Guidance for Meeting the Special Condition for the Chesapeake Bay TMDL Requirements.

Responsible Party: Stafford County Department of Public Works.

Implementation Schedule: Development of the Action Plan will be completed during permit year two with implementation of the plan in accordance with the schedule contained therein.

Items to Report: Submission of the Action Plan with the Permit Year two annual report. List of control measures implemented & summary of progress toward meeting the compliance targets during each reporting period and those to be implemented in the upcoming reporting period.

I. Public Education and Outreach on Stormwater Impacts

Permit requirement:

Implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

As operator of a regulated small MS4, Stafford County must identify, schedule, implement, evaluate, and modify, as necessary, practices that meet the following goals:

- 1. Increasing target audience knowledge about steps that can be taken to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns.*
- 2. Increasing target audience knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications.*
- 3. Implementing a diverse program with strategies that are targeted towards audiences most likely to have significant stormwater impacts.*

I(A). BMP/Program Element: Investigate the feasibility, implementation and distribution of printed material through venues/businesses that would facilitate the targeting of message disbursement for stormwater management and/or stormwater pollution prevention in the County.

Objective: To increase the awareness and knowledge of individuals, households, businesses, public employees, and the general public regarding stormwater pollution and ways to reduce it through identifying potential partners for the distribution of targeted educational information followed by getting pertinent educational information into the hands of those who are likely to have a significant impact.

Measurable Goal: Stafford County will investigate the feasibility of distributing printed stormwater pollution prevention-related materials through targeted County business enterprises identified as having either a direct impact on stormwater management and water quality in

Stafford County or contact with constituencies that may have a similar impact. Examples include home improvement stores, pet retail stores, veterinary clinics, carwash facilities, companies involved in pool maintenance and lawn/landscape care, and various County operations (i.e. IDDE investigation teams). Stafford County will then initiate the distribution of targeted public outreach materials on stormwater pollution prevention and water quality to enterprises identified above. Distribution will be based on the number of facilities willing to participate and the volume of printed materials necessary to meet public demand. At a minimum, Stafford County will make 200 copies of each printed brochure available for distribution each permit year.

Necessary Documents: The County's seven educational brochures: *Low Impact Development-Bioretenction Facilities; Riparian Buffers and Critical Resource Protection Areas; Illicit Discharge Detection and Elimination; Low Impact Development; Pet Waste Disposal, Water Quality, and Your Health; Stormwater Management; and Erosion and Sediment Control.*

Responsible Party: Stafford County Department of Public Works with assistance from the County's Administration.

Schedule: The County plans to perform these investigations in years one, two, and four of the permit and will distribute the information as appropriate based on these investigations.

Items to Report: Documentation of investigation outcomes & number of brochures distributed by source.

I(B). BMP/Program Element: Distribute printed media materials at the County Government Center and County Public Libraries.

Objective: To provide standard distribution points for stormwater management, water quality, and stormwater pollution prevention educational materials in printed form.

Measurable Goal: The County will provide printed materials to the Stafford County Government Center and the Stafford County public libraries.

Necessary Documents: The County's seven educational brochures: *Low Impact Development-Bio-retention Facilities; Riparian Buffers and Critical Resource Protection Areas; Illicit Discharge Detection and Elimination; Low Impact Development; Pet Waste Disposal, Water Quality, and Your Health; Stormwater Management; and Erosion and Sediment Control.*

Responsible Party: Stafford County Department of Public Works with assistance from the County's Administration.

Schedule: On-going activity.

Items to Report: Number of distribution points utilized, number and type of printed materials supplied to each distribution point through the year.

I(C). BMP/Program Element: Provide internet access and download capability to stormwater management and stormwater pollution prevention materials.

Objective: To provide education and information to Stafford County citizens on stormwater management, water quality, and stormwater pollution prevention via the Internet and to provide those materials in easily reproducible electronic format.

Measurable Goal: By the conclusion of permit year two, Stafford County will have posted, on its website or on a separate website, downloadable materials on stormwater pollution prevention.

Necessary Documents: The County's seven educational brochures: *Low Impact Development-Bio-retention Facilities*; *Riparian Buffers and Critical Resource Protection Areas*; *Illicit Discharge Detection and Elimination*; *Low Impact Development*; *Pet Waste Disposal, Water Quality, and Your Health*; *Stormwater Management*; and *Erosion and Sediment Control*.; Stafford County Internet web site posting protocols.

Responsible Party: Stafford County Department of Public Works with assistance from the County's Information Technology Department.

Schedule: On-going activity.

Items to Report: Number of items available for download from the Internet.

I(D). BMP/Program Element: Participate in Northern Virginia Regional Commission Clean Water Partners regional stormwater education media campaign.

Objective: To work collaboratively with other Clean Water Partners in an effort to reduce the amount of pollution reaching individual and shared waterways. Using radio, print, and television advertisements, the program maximizes the reach of messages to diverse segments of the population on properly disposing of pet waste and motor oil and proper lawn care practices to over a million residents living, playing, and working in the Northern Virginia region.

Measurable Goal: The County will provide financial and programmatic support for the Northern Virginia Regional Commission Clean Water Partners regional stormwater education media campaign so as to maintain its participation in the program. This campaign developed radio ads telling people not to dump used motor oil down a storm drain, not to over-fertilize by following fertilizer label instructions, and to pick up after their pets.

Necessary Documents: None

Responsible Party: Stafford County Department of Public Works.

Schedule: Annually.

Items to Report: The County will document its participation in the media campaign in the annual report.

I(E). BMP/Program Element: Operate the County's Stormwater Pollution Hotline for citizen complaints.

Objective: To receive and process citizen's concerns regarding stormwater management, water quality, and stormwater pollution prevention.

Measurable Goal: The County will continue to operate and log calls to the stormwater hotline. Information received during these calls will be forwarded to the proper County department for processing.

Necessary Documents: None

Responsible Party: Stafford County Department of Public Works with assistance from County Administration, and the County's Information Technology Department.

Schedule: On-going activity

Items to Report: The County will track and report the number of calls received each year in the annual report.

I(F). BMP/Program Element: Identify three (3) high priority water quality issues that contribute to the discharge of stormwater pollution.

Objective: To provide for a targeted approach to developing a public education & outreach program that addresses the highest priority water quality issues in the County's MS4.

Measurable Goal: By the conclusion of permit year one, Stafford County will have identified three (3) high priority water quality issues that contribute to the discharge of stormwater pollution.

Necessary Documents: None

Responsible Party: Stafford County Department of Public Works with assistance from the Northern Virginia Regional Commission's (NVRC) Clean Water Partners.

Schedule: This activity will be completed by the end of permit year one.

Items to Report: List of three (3) high priority water quality issues and a rationale for their selection.

- I(G). BMP/Program Element:** Identify the target audience(s) and estimate the population size of the target audience(s) most likely to have significant impacts for each of the three high-priority water quality issue.

Objective: To identify the target audiences for implementation of the County's public education & outreach program.

Measurable Goal: By the conclusion of permit year one, Stafford County will have identified and estimated the population size of the target audience(s).

Necessary Documents: None

Responsible Party: Stafford County Department of Public Works with assistance from the Northern Virginia Regional Commission's (NVRC) Clean Water Partners.

Schedule: This activity will be completed by the end of permit year one.

Items to Report: List of target audiences and estimated populations.

- I(H). BMP/Program Element:** Develop relevant message(s) and associated educational and outreach materials for message distribution to the selected target audiences while considering the viewpoints and concerns of those target audiences.

Objective: To educate the target audience on stormwater pollution and its prevention.

Measurable Goal: By the conclusion of permit year one, Stafford County, through its participation with the Northern Virginia Regional Commission's (NVRC) Clean Water Partners, will have developed relevant message(s) and associated educational and outreach materials for distribution to the selected target audiences.

Necessary Documents: Educational and outreach materials developed by the Northern Virginia Regional Commission's (NVRC) Clean Water Partners.

Responsible Party: Stafford County Department of Public Works with assistance from the Northern Virginia Regional Commission's (NVRC) Clean Water Partners.

Schedule: This activity will be initiated in permit year one and revisited each year.

Items to Report: Summary of Northern Virginia Regional Commission's (NVRC) Clean Water Partners campaign results.

I(I). BMP/Program Element: Provide for public participation during public education and outreach program development.

Objective: To solicit the public's input regarding the development of the public education and outreach program.

Measurable Goal: Stafford County will provide for public participation during the development of outreach materials, potentially through the use of surveys and/or questionnaires aimed at a particular target audience(s).

Necessary Documents: None

Responsible Party: Stafford County Department of Public Works with assistance from County Administration.

Schedule: Initiate in permit year one and revisit each year.

Items to Report: Document public participation during public education and outreach program development.

I(J). BMP/Program Element: Conduct education and outreach activities designed to reach 20% of the population of each target audience. Adjust target audience(s), messages, educational materials and delivery mechanisms as needed.

Objective: To reach out to and educate 20% of the target audience(s) on stormwater pollution and its prevention.

Measurable Goal: Annually, Stafford County, through its participation with the Northern Virginia Regional Commission's (NVRC) Clean Water Partners, will conduct education and outreach activities designed to reach 20% of the population of each target audience.

Necessary Documents: NVRC Clean Water Partners' Annual Reports

Responsible Party: Stafford County Department of Public Works with assistance from the Northern Virginia Regional Commission's (NVRC) Clean Water Partners, and the County Administration.

Schedule: Annually

Items to Report: Status report on whether the 20% goal was met.

I(K). BMP/Program Element: Implement a program to post waterway signage at road crossings of major streams in the County to identify the streams and their hydrologic connection to the Chesapeake Bay.

Objective: To increase the awareness and knowledge of the County's citizens regarding local stream watersheds and their hydrologic connection to the Chesapeake Bay.

Measurable Goal: The County will develop a list of potential locations for posting these stream signs and will investigate the feasibility of posting the signs at the selected locations.

Necessary Documents: VDOT Specifications for signage

Responsible Party: Stafford County Department of Public Works with assistance from the Virginia Department of Transportation, and County Administration.

Schedule: On-going activity.

Items to Report: List of potential sign locations and number of signs posted.

II. Public Involvement/Participation

Permit requirements:

As operator of a regulated small MS4, Stafford County must:

- 1. Comply with any applicable federal, state, and local public notice requirements.*
- 2. Post copies of each MS4 program plan on its webpage at a minimum of once a year and within 30 days of submittal of the annual report.*
- 3. Post copies of each annual report on its webpage within 30 days of submittal and retain copies of annual reports online for the duration of the permit.*
- 4. Participate, through promotion, sponsorship, or other involvement, in a minimum of four local activities annually aimed at increasing public participation to reduce stormwater pollutant loads; improve water quality; and support local restoration and cleanup projects, programs, groups, meetings, or other opportunities for public involvement.*

II(A). BMP/Program Element: Provide hard copies of the County's revised 2013-2018 MS4 Program Plan at the County Government Center and public libraries, as well as providing the MS4 Program Plan on the County's website. In addition, post current news and information announcing the availability of the MS4 Program Plan on the County's website.

Objective: To make the Stafford County MS4 Program plan available to the public.

Measurable Goal: Stafford County will post an electronic version of the plan on the County's Stormwater Management web site for download in accordance with the required timeframes. Stafford County will announce the plan's availability by posting a news item on the website prior its release.

Necessary Documents: MS4 Program Plan.

Responsible Party: Stafford County Department of Public Works with assistance from the County Administration, and the Department of Information Technology.

Schedule: Stafford County will post the MS4 Program Plan to the County's website within 30 days of submittal of the annual report.

Items to Report: A web link to the MS4 Program Plan.

II(B). BMP/Program Element: Provide hard copies of the County's Annual Report at the County Government Center and public libraries, as well as providing the Annual Report on the County's website. In addition, post current news and information announcing the availability of the Annual Report on the County's website.

Objective: To make the Stafford County MS4 Program annual reports available to the public.

Measurable Goal: Stafford County will post and retain copies online of annual reports on the County's Stormwater Management web site in accordance with the required timeframes. Stafford County will announce the annual report's availability by posting a news item on the website prior its release.

Necessary Documents: MS4 Program annual reports.

Responsible Party: Stafford County Department of Public Works with assistance from the County Administration, and the Department of Information Technology.

Schedule: Stafford County will make the MS4 Program annual reports available online within 30 days of submittal and retain copies of annual reports online for the duration of the permit.

Items to Report: A web link to the MS4 Program annual reports.

II(C). BMP/Program Element: Promote Adopt-A-Stream Program opportunities.

Objective: To notify interested citizens of the available opportunities in Stafford County to participate in stream clean-up efforts.

Measurable Goal: Throughout the permit period, the County will promote stream clean-up efforts through environmental organizations such as Friends of the Rappahannock by providing links to, and information on, these organizations on the County's Stormwater Management web site.

Necessary Documents: None

Responsible Party: Stafford County Department of Public Works and County Administration.

Schedule: On-going activity.

Items to Report: The County will document outreach to environmental groups in the annual reports.

II(D). BMP/Program Element: Promote the County's Storm Drain Marking Program.

Objective: To provide opportunities for interested citizens, including school children, to engage in hands-on environmental education by marking storm drains to denote the pollution potential and potential impacts of illicit discharges and illegal dumping into the MS4. Stafford County anticipates that the majority of any storm drain marking will take place on residential streets in County subdivisions.

Measurable Goal: Throughout the permit period, Stafford County will actively promote the storm drain marking program.

Necessary Documents: Drain markers; VDOT permits; marker application instructions.

Responsible Party: Stafford County Department of Public Works and County Administration.

Schedule: On-going activity.

Items to Report: Number of drains marked and a list of participants.

II(E). BMP/Program Element: Investigate and promote, sponsor and/or participate in at least four local activities aimed at increasing public participation with citizens and interested stakeholders.

Objective: To identify opportunities aimed at increasing public participation to reduce stormwater pollutant loads and improve water quality.

Measurable Goal: Annually, the County will investigate and participate in at least four local activities aimed at increasing public participation by citizens and interested stakeholders.

Necessary Documents: None

Responsible Party: Stafford County Department of Public Works and County Administration.

Schedule: Annually.

Items to Report: Documentation of County participation in four local public participation activities.

III. Illicit Discharge Detection and Elimination

Permit requirements:

As operator of a regulated small MS4, Stafford County must:

1. *Develop, implement and enforce a program to detect and eliminate illicit discharges.*
2. *Develop and maintain an accurate storm sewer system map showing: the location of all MS4 outfalls; the name and location of all waters receiving discharges from the MS4 outfalls; and the associated HUCs.*
3. *Develop and maintain an outfall information table that includes: the unique identifier; estimated MS4 acreage served; the name of the receiving surface water and indication as to whether the receiving water is listed as impaired in the Virginia 2010 303(d)/305(b) Water Quality Assessment Integrated Report; the name of any applicable TMDL(s).*
4. *Within 48 months of coverage under this state permit, the operator shall have a complete and updated storm sewer system map and information table that includes all MS4 outfalls located within the boundaries identified as "urbanized" areas in the 2010 Decennial Census and shall submit the updated information table as an appendix to the annual report.*
5. *Maintain a copy of the current storm sewer system map and outfall information table for review upon request by the public or DEQ.*
6. *Continue to identify other points of discharge.*
7. *Notify in writing the downstream MS4(s) of any known physical interconnection.*
8. *Effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into the storm sewer system to the extent allowable under federal, state, or local law, regulation, or ordinance.*
9. *Develop, implement, and update, when appropriate, written procedures to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping, to the small*

MS4. This includes development of a written dry weather screening methodology and follow-up procedures to detect and eliminate illicit discharges to the MS4.

10. *Promote, publicize, and facilitate public reporting of illicit discharges into or from MS4s and conduct inspections in response to complaints and to ensure corrective actions have been implemented by the responsible party.*

III(A). BMP/Program Element: Maintain a storm sewer system map and outfall information table.

Objective: To maintain a storm sewer system map and pertinent outfall information table in order to identify MS4 outfall discharge points to waters of the Commonwealth.

Measurable Goal: Stafford County will maintain its storm sewer system map and outfall information table in accordance with the requirements in the permit.

Necessary Documents: Virginia 2010 303(d)/305(b) Water Quality Assessment Integrated Report and 2010 Decennial Census.

Responsible Party: Stafford County Department of Public Works with support from the County's Geographic Information System (GIS) Department.

Schedule: Updates to be performed throughout permit term as appropriate.

Items to Report: Updated storm sewer system map and outfall information table.

III(B). BMP/Program Element: Review and amend as necessary Stafford County Stormwater Pollution and Illicit Discharge Ordinance (Article II of Section 21.5 of the County Code) for consistency with the MS4 permit.

Objective: To effectively prohibit non-stormwater discharges into the County's MS4 to the extent allowable under federal, state, and local law, regulation, or ordinance.

Measurable Goal: By the conclusion of permit year one, Stafford County will review the County's Stormwater Pollution and Illicit Discharge Ordinance and initiate the necessary amendments, if any, resulting from this review.

Necessary Documents: Stafford County Stormwater Pollution and Illicit Discharge Ordinance.

Responsible Party: Stafford County Department of Public Works with assistance from the County Attorney's office.

Schedule: Complete by the conclusion of permit year one

Items to Report: List of items, if any, requiring amendment after review of the ordinance and projected timeframe for drafting and adopting amended ordinance, if necessary.

- III(C). BMP/Program Element:** Develop, implement, and update (when appropriate) written procedures to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping, to the County's MS4.

Objective: To detect and eliminate non-stormwater discharges to the regulated small MS4.

Measurable Goal: Stafford County will develop and implement written Illicit Discharge Detection & Elimination (IDDE) Standard Operating Procedures (SOPs) that will include: dry weather screening; addressing potential illicit discharge complaints from the public; determining sources of suspected discharges; elimination of illicit discharges; coordination with other agencies; and safety.

Necessary Documents: Illicit Discharge Detection & Elimination program guidance documents

Responsible Party: Stafford County Department of Public Works.

Schedule: To be developed by the conclusion of permit year one with implementation during permit years two through five.

Items to Report: Number of outfalls screened, screening results, follow-up actions taken and the results of those investigations.

- III(D). BMP/Program Element:** Promote, publicize, and facilitate public reporting of illicit discharges into or from the County's MS4. Conduct inspections in response to complaints and ensure that corrective measures have been implemented by the responsible party.

Objective: To facilitate public reporting & investigation of potential illicit discharges into or from the County's MS4.

Measurable Goal: Utilizing the Illicit Discharge Detection & Elimination (IDDE) Standard Operating Procedures (SOPs) developed under BMP/Program Element III(C), the County's stormwater hotline, and the County's stormwater website, Stafford County will receive and follow-up on potential illicit discharge complaints in accordance with the written procedures in the SOP.

Necessary Documents: Illicit Discharge Detection & Elimination (IDDE) Standard Operating Procedures (SOPs) developed under BMP/Program Element III(C).

Responsible Party: Stafford County Department of Public Works.

Schedule: On-going activity.

Items to Report: A summary of the potential illicit discharges reported and the results of any follow-up investigations.

III(E). BMP/Program Element: Implement HAZMAT Spill Response Program.

Objective: To provide for response to hazardous spills with the goal of preventing entry of hazardous materials into the MS4.

Measurable Goal: The County will continue the Hazardous Spill Response Program with combined participation by the Stafford County Department of Public Works - Environmental Division in close coordination with the Department of Fire and Rescue.

Necessary Documents: None.

Responsible Party: Stafford County Department of Fire & Rescue and Stafford County Department of Public Works.

Schedule: Ongoing activity

Items to Report: The County will document hazardous spill response events throughout the year and report them in the annual report.

III(F). BMP/Program Element: Implement Household Hazardous Waste Collection Program.

Objective: To promote proper disposal of household hazardous wastes with the goal of preventing entry of such wastes into the MS4.

Measurable Goal: The County will continue the Household Hazardous Waste Collection Program with combined participation by the Rappahannock Regional Solid Waste Board, Department of Public Works - Environmental Division, and the County's Recycling Coordinator. The Rappahannock Regional Solid Waste Management Board (R-Board) hosts four Household Hazardous Waste Collection Days each year at sites in Fredericksburg and Stafford County.

Necessary Documents: None.

Responsible Party: R-Board and Stafford County Department of Public Works.

Schedule: Ongoing activity

Items to Report: The County will list the results of these collection days in the annual report.

III(G). BMP/Program Element: Notify downstream MS4 operators of physical interconnections of storm sewer systems with the County's MS4.

Objective: To notify downstream MS4 operators that their MS4s are physically interconnected to the Stafford County MS4.

Measurable Goal: By the conclusion of permit year two, Stafford County will notify downstream MS4 operators that their MS4 is physically interconnected with the Stafford County MS4.

Necessary Documents: Stafford County MS4 system map.

Responsible Party: Stafford County Department of Public Works.

Schedule: Complete by the conclusion of permit year two.

Items to Report: Documentation of downstream MS4s notified by Stafford County.

IV. Construction Site Stormwater Runoff Control

Permit requirements:

As operator of a regulated small MS4, Stafford County must develop, implement, and enforce procedures to address discharges into its MS4 from regulated land-disturbing activities. The procedures must include:

- 1. An ordinance or other mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance with the Virginia Erosion & Sediment Control Law and attendant regulations.*
- 2. Requirements for construction site owners and operators to acquire approval of their erosion & sediment control plan from the Virginia Erosion & Sediment Control Program Authority prior to commencement of land disturbing activities. .*
- 3. Inspection of land disturbing activities (by properly certified inspectors) for compliance with an approved erosion & sediment control plan or agreement in lieu of a plan in accordance with a schedule to inspect: upon initial installation of the E&S controls; at least once during every two-week period; within 48 hours of any runoff producing storm event; and upon completion of the project and prior to release of any applicable performance bonds.*
- 4. Procedures for receipt and consideration of information submitted by the public.*

5. *Requirements for implementation of appropriate controls to prevent non-stormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during land-disturbing activity inspections of the MS4.*
6. *Procedures that ensure that plan reviewers, inspectors, program administrators, and construction site operators obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law.*
7. *Tracking of regulated land disturbing activities to be submitted in the annual report including the total number of regulated land-disturbing activities and the total number of disturbed acres.*

IV(A). BMP/Program Element: Administer and implement the County's Erosion and Sediment Control (E&SC) Program in accordance with Virginia's Erosion and Sediment Control regulations.

Objective: To administer and implement the County's VESCP to address discharges into its MS4 from regulated land-disturbing activities.

Measurable Goal: Stafford County will maintain an approved VESCP during this permit term. Should the program be found inconsistent during this permit cycle, Stafford County will work with appropriate regulatory agency to develop a Corrective Action Agreement (CAA) to regain regulatory approval of the County's VESCP.

Necessary Documents: Stafford County Erosion & Sediment Control Ordinance (Articles I & II of Chapter 11 of the County Code)

Responsible Party: Stafford County Department of Public Works and Department of Planning & Zoning.

Schedule: Ongoing program.

Items to Report: Report on the approval status of the County's VESCP.

IV(B). BMP/Program Element: Provide training for the County's E&SC Program inspection staff.

Objective: To ensure that Stafford County E&SC Program staff maintain the proper certifications based on their job descriptions.

Measurable Goal: Stafford County Erosion and Sediment Control Program staff will remain certified as required by both the Virginia Erosion and Sediment Control Law and attendant regulations and the Stafford County Erosion and Sediment Control Program.

Necessary Documents: None

Responsible Party: Stafford County Department of Public Works and Department of Planning & Zoning.

Schedule: Ongoing Program.

Items to Report: Total number of staff members and number of certified staff for E&S Combined Administration; E&S Plan Review; and E&S Inspection as administered by Virginia DCR.

IV(C). BMP/Program Element: Administer and implement the County's Virginia Stormwater Management Program (VSMP) in accordance with the regulations of the Virginia Stormwater Management Act.

Objective: To administer and implement the County's VSMP to address discharges into its MS4 from regulated land-disturbing activities.

Measurable Goal: Stafford County will maintain an approved VSMP during this permit term. Should the program be found inconsistent during this permit cycle, Stafford County will work with appropriate regulatory agency to develop a Corrective Action Agreement (CAA) to regain regulatory approval of the County's VSMP.

Necessary Documents: Stafford County Stormwater Management Ordinance (Articles I & II of Chapter 21.5 of the County Code)

Responsible Party: Stafford County Department of Public Works and Department of Planning & Zoning.

Schedule: Ongoing program.

Items to Report: Report on the approval status of the County's VSMP.

V. Post-Construction Stormwater Management in New Development and Redevelopment

Permit requirements:

As operator of a regulated small MS4, Stafford County must develop, implement, and enforce procedures to address post-construction stormwater runoff that enters the MS4 from regulated land-disturbing activities. The procedures must include:

1. *Use an ordinance, regulation, or other mechanism to address post-construction runoff and ensure compliance with the Virginia Stormwater Management Act and attendant regulations and update it as necessary.*

2. *Requirements for construction site owners and operators to secure authorization to discharge stormwater from construction activities under a VSMP permit for construction activities that result in a land disturbance of greater than or equal to one acre.*
3. *Require adequate long-term operation and maintenance of stormwater management facilities including a recorded inspection schedule and maintenance agreement and tracking and enforcement mechanisms.*
4. *Conduct site inspection and enforcement measures consistent with the Virginia Stormwater Management Act and attendant regulations.*
5. *Maintain a database of all known permanent stormwater management facilities (both private and Stafford County owned) that discharge into the MS4 by type, location, acres treated (pervious and impervious), date brought on-line, HUC, impaired surface water, owner type (MS4 owned or private), status of maintenance agreement, and most recent inspection date.*

V(A). BMP/Program Element: Administer and implement the County's Virginia Stormwater Management Program (VSMP) in accordance with the regulations of the Virginia Stormwater Management Act.

Objective: To administer and implement the County's VSMP to address discharges into its MS4 from regulated land-disturbing activities.

Measurable Goal: Stafford County will maintain an approved VSMP during this permit term. Should the program be found inconsistent during this permit cycle, Stafford County will work with appropriate regulatory agency to develop a Corrective Action Agreement (CAA) to regain regulatory approval of the County's VSMP.

Necessary Documents: Stafford County Stormwater Management Ordinance (Articles I & II of Chapter 21.5 of the County Code)

Responsible Party: Stafford County Department of Public Works and Department of Planning & Zoning.

Schedule: Ongoing program.

Items to Report: Report on the approval status of the County's VSMP.

V(B). BMP/Program Element: Develop/present a seminar for Homeowner's Associations (HOAs) on the requirements for and proper maintenance of stormwater management facilities.

Objective: To educate HOAs that are responsible for stormwater management facilities on the requirements for and proper maintenance of these facilities. This effort will help to raise the awareness of the local community to the purpose of these facilities and the need for proper maintenance. This BMP also addresses Public Education & Outreach under MCM #1.

Measurable Goal: Stafford County will develop and present a seminar on the requirements for and proper maintenance of these stormwater management facilities.

Necessary Documents: None

Responsible Party: Stafford County Department of Public Works with assistance from County Administration.

Schedule: Develop/update the presentation by the end of permit year one and make presentations to HOAs during years two through five of the permit.

Items to Report: Date of seminar and attendance list.

V(C). BMP/Program Element: Develop written procedures for inspection, maintenance, and enforcement of maintenance agreements (when applicable) for stormwater management facilities located within or discharging into the MS4.

Objective: To facilitate proper oversight of adequate long-term operation and maintenance of permanent storm water facilities located within or discharging into the MS4.

Measurable Goal: In accordance with Table 1 in the General Permit, Stafford County will develop written procedures for inspection, maintenance, and enforcement of agreements (as applicable) for stormwater management facilities located within or discharging into the MS4.

Necessary Documents: None

Responsible Party: Stafford County Department of Public Works.

Schedule: Begin development in permit year one with further refinements to be made in permit year two.

Items to Report: Upon completion for the written procedures, include a copy in the next annual report.

V(D). BMP/Program Element: Inspect permanent, post-construction stormwater management facilities that are privately-owned at least once every five years.

Objective: To provide an oversight mechanism for adequate long-term operation and maintenance of permanent storm water management facilities by the owner.

Measurable Goal: Within the required timeframes established in the General Permit, Stafford County will visually inspect private stormwater management facilities in accordance with the County's applicable written inspection policies and procedures.

Necessary Documents: Stafford County stormwater management facilities database

Responsible Party: Stafford County Department of Public Works.

Schedule: By the conclusion of permit year five.

Items to Report: Total number of inspections completed and enforcement actions taken (if applicable).

V(E). BMP/Program Element: Annually inspect permanent, post-construction stormwater management facilities that are County-owned / operated.

Objective: To provide an oversight mechanism for adequate long-term operation and maintenance of permanent storm water management facilities by the owner.

Measurable Goal: Within the required timeframes established in the General Permit, Stafford County will visually inspect County-owned stormwater management facilities in accordance with the County's applicable written inspection policies and procedures.

Necessary Documents: Stafford County stormwater management facilities database

Responsible Party: Stafford County Department of Public Works.

Schedule: Annually

Items to Report: Total number of inspections completed.

V(F). BMP/Program Element: Conduct appropriate maintenance on permanent, post-construction stormwater management facilities owned / operated by the County as necessary.

Objective: To ensure long-term maintenance of the County's MS4 stormwater management facilities.

Measurable Goal: Based on the annual inspection of the County's MS4 owned stormwater management facilities, the County will conduct the appropriate maintenance on its facilities as necessary.

Necessary Documents: Annual inspection reports of County MS4 owned stormwater management facilities.

Responsible Party: Stafford County Department of Public Works.

Schedule: Ongoing program depending upon the scope of maintenance necessary.

Items to Report: Inclusion in the annual report of a description of maintenance activities performed during that permit year.

V(G). BMP/Program Element: Develop and update, as necessary, the County's database of permanent, post-construction stormwater management facilities.

Objective: To maintain an inventory of post-construction stormwater management facilities that discharge into the County's MS4.

Measurable Goal: Stafford County will develop and maintain an electronic database (populated with required information per the General Permit) of all known County-Owned and privately-owned stormwater management facilities that discharge into the MS4.

Necessary Documents: Inventory of permanent stormwater management facilities.

Responsible Party: Stafford County Department of Public Works and Department of Planning & Zoning.

Schedule: Ongoing program.

Items to Report: Stafford County will submit an electronic database or spreadsheet of all stormwater management facilities brought online during each reporting year with the appropriate annual report.

VI. Pollution Prevention/Good Housekeeping for Municipal Operations

Permit requirements:

As operator of a regulated small MS4, Stafford County must shall develop and implement written procedures designed to minimize or prevent pollutant discharge from: (i) daily operations such as road, street, and parking lot maintenance; (ii) equipment maintenance; and (iii) the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers. These written procedures shall be designed to:

1. *Prevent illicit discharges;*
2. *Ensure the proper disposal of waste materials, including landscape wastes;*
3. *Prevent the discharge of municipal vehicle wash water into the MS4 without authorization under a separate VPDES permit;*
4. *Prevent the discharge of wastewater into the MS4 without authorization under a separate VPDES permit;*
5. *Require implementation of best management practices when discharging water pumped from utility construction and maintenance activities;*
6. *Minimize the pollutants in stormwater runoff from bulk storage areas (e.g., salt storage, topsoil stockpiles) through the use of best management practices;*
7. *Prevent pollutant discharge into the MS4 from leaking municipal automobiles and equipment; and*
8. *Ensure that the application of materials, including fertilizers and pesticides, is conducted in accordance with the manufacturer's recommendations.*

VI(A). BMP/Program Element: Develop written procedures for daily good housekeeping on County owned/operated facilities.

Objective: To support the identification and elimination of illicit discharges at and prevention of stormwater pollution from County facilities.

Measurable Goal: Prior to the end of permit year two, Stafford County will develop written procedures for daily good housekeeping on County owned/operated facilities.

Necessary Documents: Standard Operating Procedures (SOPs) for Illicit Discharge Inspection and Stormwater Pollution Prevention.

Responsible Party: Stafford County Department of Public Works.

Schedule: Complete prior to the conclusion of permit year two.

Items to Report: A summary report on the development and implementation of the daily operational procedures.

VI(B). BMP/Program Element: Identify all municipal, high-priority facilities including those that have a high potential for discharging pollutants.

Objective: To support the identification and elimination of illicit discharges at and prevention of stormwater pollution from County facilities.

Measurable Goal: By the conclusion of permit year one, Stafford County will identify all municipal high-priority facilities in accordance with the General Permit along with those facilities having a high potential of discharging pollutants.

Necessary Documents: None.

Responsible Party: Stafford County Department of Public Works.

Schedule: By the conclusion of permit year one.

Items to Report: List of all municipal high-priority facilities and those facilities having a high potential of discharging pollutants.

VI(C). BMP/Program Element: Develop and implement SWPPPs for all municipal high-priority facilities that have a high potential for discharging pollutants.

Objective: To support the identification and elimination of illicit discharges at and prevention of stormwater pollution from County facilities.

Measurable Goal: Prior to the conclusion of permit year four, Stafford County will develop and implement specific stormwater pollution prevention plans for all high-priority facilities identified in BMP Program Element VI(B) as having a high potential of discharging..

Necessary Documents: List of all municipal high-priority facilities having a high potential of discharging pollutants.

Responsible Party: Stafford County Department of Public Works with assistance from the Department of Parks, Recreation & Community Facilities, Department of Fire & Rescue, and the Department of Utilities.

Schedule: Complete prior to the conclusion of permit year four.

Items to Report: A summary report on the development and implementation of the required SWPPPs.

VI(D). BMP/Program Element: Identify all applicable lands where nutrients are applied to a contiguous area of more than one acre.

Objective: To reduce excess runoff of nutrients from County facilities.

Measurable Goal: Prior to the completion of permit year one, Stafford County will identify all applicable lands where nutrients are applied to a contiguous area of more than one acre.

Necessary Documents: None.

Responsible Party: Stafford County Department of Public Works with assistance from the Department of Parks, Recreation & Community Facilities.

Schedule: Complete prior to the conclusion of permit year one.

Items to Report: List of applicable lands where nutrients are applied to a contiguous area of more than one acre.

VI(E). BMP/Program Element: Develop and implement turf and landscape nutrient management plans on all lands where nutrients are applied to a contiguous area of more than one acre.

Objective: To reduce excess runoff of nutrients from County facilities.

Measurable Goal: Stafford County will develop and implement turf and landscape nutrient management plans on all lands where nutrients are applied to a contiguous area of more than one acre.

Necessary Documents: List of applicable lands where nutrients are applied to a contiguous area of more than one acre.

Responsible Party: Stafford County Department of Public Works with assistance from the Department of Parks, Recreation & Community Facilities.

Schedule: Implementation of all required turf and landscape nutrient management plans within the five year permit cycle as follows: By the end of permit year two, not less than 15% of all identified acres will be covered by turf and landscape nutrient management plans; by the end of permit year three, not less than 40% of all identified acres will be covered by turf and landscape nutrient management plans; by the end of permit year four, not less than 75% of all identified acres will be covered by turf and landscape nutrient management plans; and the remainder by the end of permit year five.

Items to Report: A summary report on the development and implementation of the turf and landscape nutrient management plans.

VI(F). BMP/Program Element: Develop and implement an annual training plan and schedule in accordance with the requirements of the Permit.

Objective: Provide for County staff to be trained on the written good housekeeping procedures and other applicable stormwater pollution prevention practices.

Measurable Goal: By the conclusion of permit year two, Stafford County will provide staff training for implementation of SOPs for Illicit Discharge Inspection and Stormwater Pollution Prevention.

Necessary Documents: Standard Operating Procedures (SOPs) for Illicit Discharge Inspection and Stormwater Pollution Prevention.

Responsible Party: Stafford County Department of Public Works with assistance from the Department of Parks, Recreation & Community Facilities, Department of Fire & Rescue, and the Department of Utilities.

Schedule: In accordance with Table 1 in the General Permit and the schedule developed under this BMP/Program Element.

Items to Report: A summary report on the required training, including a list of training events, the training date, the number of employees attending training and the objective of the training.

VI(G). BMP/Program Element: Provide biennial training to field personnel in the recognition and reporting of illicit discharges.

Objective: Provide for County staff to be trained on recognition and reporting of illicit discharges.

Measurable Goal: By the conclusion of permit year two, Stafford County will provide staff training for implementation of SOPs for Illicit Discharge Inspection.

Necessary Documents: Standard Operating Procedures (SOPs) for Illicit Discharge Inspection and Stormwater Pollution Prevention and the County's annual training plan and schedule.

Responsible Party: Stafford County Department of Public Works with assistance from the Department of Planning & Zoning, Department of Parks, Recreation & Community Facilities, Department of Fire & Rescue, and the Department of Utilities.

Schedule: In accordance with Table 1 in the General Permit and the schedule developed under the County's annual training plan.

Items to Report: A summary report on the required training, including a list of training events, the training date, the number of employees attending training and the objective of the training.

VI(H). BMP/Program Element: Provide biennial training to County employees regarding good housekeeping and pollution prevention practices that are to be employed: (i) during road, street and parking lot maintenance; (ii) in and around maintenance and public works facilities; and (iii) in and around recreational facilities.

Objective: Provide for County staff to be trained on the written good housekeeping procedures and other applicable stormwater pollution prevention practices.

Measurable Goal: By the conclusion of permit year two, Stafford County will provide staff training on Stormwater Pollution Prevention.

Necessary Documents: Standard Operating Procedures (SOPs) for Illicit Discharge Inspection and Stormwater Pollution Prevention and the County's annual training plan and schedule.

Responsible Party: Stafford County Department of Public Works with assistance from the Department of Planning & Zoning, Department of Parks, Recreation & Community Facilities, Department of Fire & Rescue, and the Department of Utilities.

Schedule: In accordance with Table 1 in the General Permit and the schedule developed under the County's annual training plan.

Items to Report: A summary report on the required training, including a list of training events, the training date, the number of employees attending training and the objective of the training.

VI(I). BMP/Program Element: Ensure and/or require that all employees or private contractors who apply pesticides and herbicides receive proper training and certification in accordance with the Virginia Pesticide Control Act.

Objective: Provide for certification and training of all employees or private contractors who apply pesticides and herbicides.

Measurable Goal: The County will require that all applicable County employees (and County-hired contractors) who apply pesticides and herbicides are certified in accordance with the Virginia Pesticide Control Act.

Necessary Documents: The County's annual training plan and schedule.

Responsible Party: Stafford County Department of Public Works with assistance from the Department of Parks, Recreation, & Community Facilities.

Schedule: In accordance with Table 1 in the General Permit and the schedule developed under the County's annual training plan which normally requires re-certification every two years.

Items to Report: A summary report on the certification status of applicable County employees.

VI(J). BMP/Program Element: Ensure that County emergency response employees have training in spill response and provide in the first annual report a summary of the training or certification program provided to all such employees.

Objective: Provide for County emergency response employees to be trained on spill response.

Measurable Goal: By the conclusion of permit year one, the County will ensure that emergency response employees have appropriate training in spill response.

Necessary Documents: The County's annual training plan and schedule.

Responsible Party: Stafford County Department of Fire & Rescue with assistance from the Department of Public Works.

Schedule: In accordance with Table 1 in the General Permit and the schedule developed under the County's annual training plan.

Items to Report: A summary of the training or certification program provided to all applicable County employees.

VI(K). BMP/Program Element: Maintain required documentation on each training event for a period of three (3) years after each training event.

Objective: Provide for County staff to be trained on the written good housekeeping procedures and other applicable stormwater pollution prevention practices.

Measurable Goal: The County will maintain required documentation on each training event for a period of three (3) years after each training event.

Necessary Documents: The County's annual training plan and schedule.

Responsible Party: Stafford County Department of Public Works with assistance from the Department of Planning & Zoning, Department of Parks, Recreation & Community Facilities, Department of Fire & Rescue, and the Department of Utilities.

Schedule: In accordance with Table 1 in the General Permit and the schedule developed under the County's annual training plan.

Items to Report: A summary report providing documentation on each training event held.

VI(L). BMP/Program Element: Require that all municipal contractors use appropriate control measures and procedures for stormwater discharges to the County's MS4 and include oversight procedures in the County's MS4 program plan.

Objective: Facilitate the use of appropriate control measures and procedures for stormwater discharges to the County's MS4.

Measurable Goal: The County will require that all municipal contractors use appropriate control measures and procedures for stormwater discharges to the County's MS4.

Necessary Documents: None.

Responsible Party: Stafford County Department of Public Works with assistance from the Department of Parks, Recreation, & Community Facilities.

Schedule: On-going program.

Items to Report: A summary report on the enforcement actions taken (if applicable).